sequence and the amino-terminal residue of said carboxy-terminal flanking sequence.--

IN THE CLAIMS

Please cancel claim 8.

Please amend claims 3 and 12 as follows:

3. (Amended) A process for increasing the concentration of HDL cholesterol in the blood of a mammal whose blood contains cholesteryl ester transfer protein (CETP) that comprises the steps of:

(a) immunizing said mammal with an inoculum containing a vehicle in which is dissolved or dispersed a recombinant DNA molecule comprising a DNA sequence that contains (i) a sequence encoding a CETP immunogen linked to (ii) a promoter sequence that controls the expression of said CETP immunogen DNA sequence in said mammal, said CETP immunogen [being] comprising an antigenic carrier of hepatitis B core protein to which is covalently bonded one or more immunogenic polypeptides [having] comprising a CETP amino acid residue sequence of about 10 to about 30 residues [, said immunization providing an amount of said recombinant DNA molecule sufficient to induce antibodies to CETP]; and

(b) maintaining said immunized mammal for a time period sufficient for said CETP immunogen to be expressed and for the production of antibodies that bind to CETP and lessen the transfer of cholesteryl esters from HDL, thereby reducing the HDL concentration.

12. (Amended) The process according to claim [8] 3 wherein said encoded exogenous antigenic carrier is fused to both the amino-terminus and carboxy-terminus of said encoded immunogenic polypeptide.

Please add new claims 22-39 as follows:

--22. The process according to claim 3 wherein said one or more immunogenic polypeptide is of a sequence selected from the group consisting of SEQ ID NOs:2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 29, 32, 33, 34, 35, 36, 37 and 50.

23. The process according to claim 13 wherein said one or more immunogenic polypeptide is of a sequence selected from the group consisting of SEQ ID NOs:2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 29, 32, 33, 34, 35, 36, 37 and 50.

24. The process according to claim 6 wherein said encoded human CETP immunogenic polypeptide comprises a sequence selected from the group consisting SEQ ID NOs:8-13 and 29.

25. The process according to claim 7 wherein said encoded rabbit CETP immunogenic polypeptide comprises a sequence selected from the group consisting SEQ ID NOs:2-7 and 50.

26. The process according to claim 3 wherein said recombinant DNA molecule encodes monkey CETP as said immunogenic polypeptide.

27. The process according to claim 26 wherein said encoded monkey CETP immunogenic polypeptide comprises a sequence selected from the group consisting SEQ ID NOs: 32-36 and 37.

28. The inoculum according to claim 35 wherein said one or more immunogenic polypeptide is of a sequence selected from the group consisting of SEQ ID NOs: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 29, 32, 33, 34, 35, 36, 37 and 50.

29. A recombinant DNA molecule comprising a DNA sequence that contains (i) a sequence encoding a cholesteryl ester transfer protein (CETP) immunogen linked to (ii) a promoter sequence that controls the expression of said CETP immunogen DNA sequence in a mammal, said CETP immunogen being comprised of an exogenous antigenic carrier of hepatitis B core protein to which is covalently bonded one or more immunogenic polypeptides of a CETP amino acid residue sequence of about 10 to about 30 residues.

30. The recombinant DNA according to claim 29 wherein said promoter sequence is a cytomegalovirus immediate-early promoter sequence.

31. The recombinant DNA according to claim 30 wherein one or more immunogenic polypeptide is of a sequence selected from the group consisting of SEQ ID NOs:2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 29, 32, 33, 34, 35, 36, 37 and 50.

32. The process according to claim 13 wherein the number of amino acid residues present in said encoded immunogenic polypeptide is about equal in number to the number of amino acid residues absent from said HBcAg amino acid residue

sequence between the carboxy-terminal residue position of said amino-terminal flanking sequence and the amino-terminal residue of said carboxy-terminal flanking sequence.

33. The process according to claim 3 wherein said encoded immunogenic polypeptide has the amino acid residue sequence of SEQ ID NOs:29 or 50.

34. The process according to claim 3 wherein said immunization is carried out by injecting said inoculum into muscle or skin of said mammal.

35. An inoculum that comprises a recombinant DNA molecule comprising a DNA sequence that contains (i) a sequence encoding a CETP immunogen linked to (ii) a promoter sequence that controls the expression of said CETP immunogen DNA sequence in a mammal, said recombinant DNA molecule being dissolved or dispersed in an effective amount in a vehicle, said CETP immunogen comprising an antigenic carrier of hepatitis B core protein to which is covalently bonded one or more immunogenic polypeptides comprising a CETP amino acid residue sequence of about 10 to about 30 residues.

36. The inoculum of claim 35 wherein the concentration of said DNA encoding said CETP immunogen is about 0.05 μg/ml to about 20 mg/ml.

37. The inoculum of claim 35 wherein said vehicle is phosphate-buffered saline.

38. The inoculum of claim 35 wherein said vehicle is isotonic sucrose.

39. The inoculum of claim 35 wherein said DNA is complexed with liposomes.--

REMARKS

Consideration of the above-identified application is respectfully requested in view of the amendments above and the discussion that follows.

Claims 3 and 12 have been amended, claim 8 cancelled and claims 22 through 39 have been added. The specification has also been amended. Claims 3-7, 12, 13 and 22-39 are in the case and are before the Examiner.